#### **REMARKS/ARGUMENTS**

In an office action dated April 16, 2008, claims 1-2, 5-9, and 11-28 were rejected. The applicants respectfully traverse these rejections and, in conjunction with the following remarks, submit that the claims are allowable over the cited art.

The office action indicates that the rejections of claims 1-28 under 35 U.S.C. § 112 have been withdrawn. The office action also indicates that the objections to claims 1-28 have been withdrawn. The applicants thank the examiner for withdrawal of the claim rejections and objections.

The office action essentially raises two issues. First, the office action rejects claims 18-21 as being directed to non-statutory subject matter under 35 U.S.C. § 101. Second, the office action rejects claims 1-2, 5-9, and 11-28 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application 2002/0198755 to Birkner, et al. The applicants respectfully request reconsideration and withdrawal of the rejections.

#### 35 U.S.C. §101 rejections

The office action indicates that the "examiner withdraws.... the 35 USC 101 rejection pertaining to claims 1, 9, and 22 but .... maintains the 35 USC 101 rejection pertaining to claim 18." The office action also indicates that "[c]laims 18-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter." Specifically, the office action states:

[t]he claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process.... As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se...* Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as

descriptive material *per se...* When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized.

The applicants respectfully traverse these rejections.

### The Claimed Multi-User Computer System is a Statutorily Acceptable Machine

Claims 18-21 as amended relate to "a multi-user computer system." This subject matter comprises useful, concrete and tangible system. Further, the elements of independent claim 18 as amended relate to physical articles of the computer system. For example, claim 18 as amended requires "means for accessing a <u>machine readable record</u> from a <u>database</u> for a first user; means for accessing the <u>machine readable record</u>; means for requesting a first change to the <u>machine readable record</u> by the first user; means for checking for an authorization to make the first change to the <u>machine readable record</u>; and means for updating the first change to the <u>machine readable record</u> for both the first user and the second user substantially simultaneously while the first user and the second user are accessing the <u>machine readable record</u>, if the authorization is granted." (Emphasis added). Accordingly, in claim 18, a "machine readable record" and a "database" correspond to "physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101."

## The Claimed Subject Matter is Not a "Data Structure" or a "Computer Program"

The office action also states that claim 18 as amended is "at best, functional descriptive material per se." The applicants respectfully disagree. MPEP § 2106.01 indicates that "functional descriptive material' consists of data structures and computer programs which impart functionality when employed as a computer component." (Emphasis added) (A data structure is defined as "a physical or logical relationship

among data elements, designed to support specific data manipulation functions" MPEP § 2106.01). However, claim 18 as amended is drawn to a "multi-user computer system", not a "data structure" or a "computer program". Thus, the office action's assertion that claim 18 as amended is "functional descriptive material *per se*" is clearly not a proper rejection and should be withdrawn.

Furthermore, even if the subject matter of claim 18 as amended were considered a "data structure" or a "computer program" as required under the definition of "functional descriptive material" in MPEP § 2106.01, claim 18 as amended would still fall within a statutory category. Specifically, "a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, *and is thus statutory*." MPEP § 2106.01(I) (emphasis added). Similarly, if a "computer program is being claimed as part of an otherwise statutory manufacture or machine.... The *claim remains statutory* irrespective of the fact that a computer program is included in the claim." *Id.* (Emphasis added).

Thus, even if claim 18 as amended were considered to comprise a computer program or a data structure as required to be "functional descriptive material", the fact that claim 18 as amended is "a multi-user computer system" and requires "a <u>machine readable record</u>" and "a <u>database</u>" precludes claim 18 as amended from being "functional descriptive material *per se*." Accordingly, claim 18 as amended would still fall within statutory subject matter.

# The Claimed Subject Matter is Expressly Permitted Under 35 U.S.C. §112, paragraph 6

Further, claims 18-21 are expressly permitted by statute. 35 U.S.C. §112, paragraph 6 provides that, "An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents

thereof." In claim 18, each element is claimed in accordance with 35 U.S.C. §112, paragraph 6. Consequently, claim 18 is <u>expressly permitted</u> by statute, and cannot be regarded as non-statutory subject matter.

The Finality of the Office Action Should be Withdrawn Based on the New Grounds for Rejection

Additionally, the office action has improperly made a final rejection of claims 18-21 on a different basis under 35 USC § 101 than in the initial office action of August 8, 2007. Specifically, MPEP § 706.07 indicates that "[u]nder present practice, second or any subsequent actions on the merits shall be final, except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims, nor based on information submitted in an information disclosure statement... The examiner should never lose sight of the fact that in every case the applicant is entitled to a full and fair hearing, and that a clear issue between applicant and examiner should be developed." Accordingly, the applicants respectfully request that the examiner give the above arguments regarding the rejection of claims 18-21 as amended under 35 USC § 101 due consideration and that the rejections relating to 35 U.S.C. § 101 be withdrawn.

#### 35 U.S.C. §102 rejections

Claims 1-2, 5-9, and 11-28 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application No. 2002/0198755 (the "Birkner" reference). The office action states that the Birkner reference discloses:

a method of synchronizing data in a multi-user computer network [(i.e. hot sync) See Paragraph 0048, 0054, 0223], comprising: accessing a record from a database for a first user [(i.e. estimator workstation 152) See Figure 1, Item 152]; accessing the record for a second user while the first user is accessing the record [(i.e. project manager 150) See Figure 1, Item 150]; requesting a first change to the record by the first user [("change order") See Paragraph 0046, 0200, 0223]; determining by the network server [See

Paragraph 0034-0042 & Figures 1-3 wherein the "change order module 177" resides on the network server – See Figure 3, Item 177] whether the first change to the record is authorized [("If change is accepted...") See Paragraph 0129, 0200, 0223]; if the change is authorized, updating the record [("update the bid") See Paragraph 0046, 0200, 0223] with the first change for both the first user and the second user substantially simultaneously [("update the bid") See Paragraph 0046, 0200, 0223].

#### In regard to claim 1, the office action states:

[a]pplicant argued on page 9 of 12, "[h]owever, the Birkner reference fails to teach several limitations required by claim 1, as amended. For example, the Birkner reference fails to disclose 'accessing the record from the database for a second user while the first user is accessing the record.' In fact, this element cannot be found anywhere in the Birkner reference..."... [E]xaminer maintains Birkner teaching of 'the host system will be *reflected on* both systems after synchronization' [which] meets applicant's claim language and therefore, examiner maintains the rejection.

The applicants respectfully traverse this rejection. To support a rejection as being anticipated under 35 U.S.C. § 102, a single reference must disclose each and every element and limitation of the claims. In the absence of even a single claim element or limitation, a rejection under 35 U.S.C. § 102 is inappropriate. MPEP § 2131. Further, it is well established that the terms of a claim are generally given their ordinary and customary meaning as they would have to a person of ordinary skill in the art for which the invention pertains. The person of ordinary skill in the art is deemed, however, to have read and understood the claims in the context of the specification. MPEP § 2111.01.

# The Birkner reference does not disclose "accessing a record for a second user while the first user is accessing the record"

Each of the independent claims 1, 9, and 18 as amended requires "accessing the... record for a second user while the first user is accessing the... record," with independent claim 22 as amended requiring "accessing the record to perform a second function on a second network node while the first network node is accessing the record." The Birkner reference discloses no such limitation. The office action asserts that the Birkner reference teaches "accessing the record for a second user while the first user is accessing the record" because Birkner teaches "the host system will be *reflected on both* systems after synchronization." However, the office action misquotes the Birkner reference. The statement "the host system will be reflected on both systems after synchronization" is not found anywhere in the Birkner reference. Presumably, the office action is referring to paragraph [0223] of the Birkner reference which states "[c]hanges made on the computer system and the host computer will be reflected on both systems after synchronization."

The office action's assertion that changes that are "reflected on both systems after synchronization" anticipates the requirement of "accessing the... record from the database for a second user while the first user is accessing the... record" represents a misunderstanding and/or mischaracterization of the meaning of "synchronization" as disclosed in the Birkner reference. The process of "synchronization" as disclosed in the Birkner reference is illustrated in the "[p]suedo-code for the synchronization of project information between the inspector's computer and the server." (Paragraphs [0048] to [0053]). The Birkner reference indicates that the synchronization process between the "inspector's computer and the server is as follows:

- [0049] Steps done by the Estimator/DB Administrator
- [0050] Enters New Project Information into the Master Database
- [0051] Activates the Upload/Download Menu
- [0052] Selects the New Project just created
- [0053] Selects the Send Button[.]"

Clearly, changes that are "reflected on both systems after synchronization" as disclosed in the Birkner reference requires that the "inspector... activate the upload/download menu" after entering in "new project information" and then "select the send button" in order to achieve "synchronization of project information between the inspector's computer and the server." This synchronization process requires the "inspector" to "upload" and "send" the new project information for the new project information to be synchronized between the computer and server. (Paragraphs [0051] and [0053]). This sequence makes it impossible for another user to access the "new project information" entered by the "inspector" before and until the "inspector" activates the "upload/download menu" and "selects the new project" and "selects the send button." (Paragraphs [0050] - [0053]). Thus, two users could not be accessing the "new project information" at the same time because the "inspector" must perform several steps manually before another user can view the new information.

In fact, the "synchronization" process of the Birkner reference fails to indicate whether at any time, either during or after "synchronization", two users may access the same record at the same time. The "synchronization" process disclosed in the Birkner reference simply indicates how new information is entered, uploaded, and sent to a server. Accordingly, the Birkner reference fails to disclose "accessing the... record for a second user while the first user is accessing the... record" as required by claims 1, 9, 18, as amended and "accessing the record to perform a second function on a second network node while the first network node is accessing the record" as required by claim 22, as amended.

The Birkner reference does not disclose "updating the first change to the record for both the first user and the second user substantially simultaneously while the first user and the second user are accessing the record"

The office action indicates that:

[a]pplicant argued on pages 9-10 "[s]imilarly, the Birkner reference fails to disclose 'updating the first change to the record for both the first user and the second user substantially simultaneously'."... [E]xaminer maintains Birkner teaching of 'change order' and 'update the bid' in paragraphs 0046, 0200, and 0223 is the same as applicant's claim language... Birkner goes on to further teach "the host system will be reflected on both systems after synchronization"...which is equivalent to applicant's claim language of "...for both the first user and the second user substantially simultaneously."

The applicants respectfully traverse this rejection. The Birkner reference fails to disclose "updating the first change to the ...record for both the first user and the second user substantially simultaneously... while the first user and the second user are accessing the... record" as required by claims 1, 9, and 18 as amended, and/or "updating the first change to the record for both the first network node and the second network node substantially simultaneously while the first network node and the second network node are accessing the record" as required by claim 22, as amended. Instead, the Birkner reference gathers construction information through a series of computers that are periodically connected to a central server which stores the data in a database. In the Birkner reference, an end user's computer can only communicate when connected to the server and only then can changed data be "synchronized" between the two systems, using the "synchronization" process described in paragraphs [0048] to [0053].

The office action asserts that "change order" and "update the bid" in paragraphs [0046], [0200], and [0223] of the Birkner reference are the same as "updating the first change to the ...record for both the first user and the second user substantially simultaneously... while the first user and the second user are accessing the... record" as required by claims 1, 9, and 18 as amended. However, the office action mischaracterizes the meaning of "change order" and "update the bid" as disclosed in the Birkner reference and gives no reason or analysis as to why these terms anticipate "updating the first

change to the ...record for both the first user and the second user substantially simultaneously... while the first user and the second user are accessing the... record." The office action merely asserts an unsubstantiated conclusory statement that these terms in paragraphs [0046], [0200], and [0223] of the Birkner reference are "the same as applicant's claim language."

Paragraph [0046] of the Birkner reference teaches that the "inspector selects a new project... and downloads information associated with the selected project to this laptop.... Once downloaded, the inspector can *update the bid* item quantities..." (Emphasis added). The concept of "update the bid" simply indicates downloading new information and using it to update old information. Thus, "update the bid" fails to teach "updating the first change to the ...record for both the first user and the second user substantially simultaneously... while the first user and the second user are accessing the... record." "Update the bid" as disclosed in the Birkner reference does not teach anything about a "first user" and "second user," teaches nothing about updating for both users "substantially simultaneously," and does not disclose performing the updating to the record while both users are accessing the record.

Further, a "change order" as disclosed in the Birkner reference also fails to anticipate "updating the first change to the ...record for both the first user and the second user substantially simultaneously... while the first user and the second user are accessing the... record." Paragraph [0200] of the Birkner reference discloses that "[t]he daily field reports modules ... can communicate with a change order module... in the event changes are required. If so, the change order module... communicates with the unit bit price... and the new contract module." Thus, "change order" as disclosed in the Birkner reference does not teach anything about a "first user" and "second user" and teaches nothing about updating for both users "substantially simultaneously," and does not disclose performing the updating to the record while both users are accessing the record. Further, despite the office action's statement that paragraph [0223] of the Birkner

reference teaches "change order" and "update the bid," this paragraph does not mention either term.

The office action also asserts that the caption "the host system will be reflected on both systems after synchronization" teaches both "accessing the ...record from the database for a second user while the first user is accessing the... record" and "updating the first change to the ...record for both the first user and the second user substantially simultaneously... while the first user and the second user are accessing the... record". However, as discussed above, the caption "the host system will be reflected on both systems after synchronization" does not disclose anything about "accessing the record", let alone "accessing the... record from the database for a second user while the first user is accessing the... record." Further, as discussed above, this caption does not disclose "updating the first change to the ...record for both the first user and the second user substantially simultaneously... while the first user and the second user are accessing the... record." Not only does the caption "the host system will be reflected on both systems after synchronization" fail to anticipate either claim element, but the caption could not possibly disclose both of the claim elements. The office action's assertion that the caption teaches both claim elements is misplaced and seeks to expand the Birkner reference far beyond its disclosure.

#### The office action also states:

[a]pplicant argued on pages 10-11, "[c]learly, an end user dialing up to a network 'at the end of each day' as disclosed in Birkner cannot possibly disclose 'updating the first change to the record for both the first user and the second user substantially simultaneously"... Applicant has only cited "bits and pieces" of Birkner. Birkner correctly states in paragraphs 0034-0036, "The data transfer <u>can be</u> performed using this dial up network OR directly from local area networks at the main office. Specifically, the dial up network can simply be the Plain Old Telephone Service (POTS) network" Birkner goes on to disclose, "the dialup network 120 in turn is

connected to a server 130". Nevertheless, paragraph 0023, Birkner states, "during operation, the synchronization software runs in the background mode on the host computer 82 and listens for a synchronization request or command...changes made on the computer system and the host computer will be reflected on both systems after synchronization..." Examiner maintains Birkner teaching 'the host system will be reflected on both systems after synchronization'...which is equivalent to applicant's claim language of 'for both the first user and the second user substantially simultaneously.' Therefore, examiner maintains the rejection.

The applicants respectfully disagree. The Birkner reference fails to disclose "updating the first change to the ...record for both the first user and the second user substantially simultaneously... while the first user and the second user are accessing the... record" as required by claims 1, 9, and 18 as amended, and/or "updating the first change to the record for both the first network node and the second network node substantially simultaneously while the first network node and the second network node are accessing the record" as required by claim 22 as amended. Instead, the Birkner reference discloses a periodic connection that is initiated by the end user. This periodic connection is evidenced by the description of the need for dialup connection initiated by an end user in that "at the end of each day, each inspector updates information for his . . . projects and uploads or transmits that information back to the daily project folders . . . " (Paragraph [0044]; emphasis added). Further, an end user "sets up a dialup connection, logs-in . . ., and invokes an upload/download menu. . . At the end of the day, the inspector runs a daily field report ... The report can also cover a range of days, so that if the inspector has been out on a job all week and has been filling out daily field journals every day, a range of days can be selected for transmission at once." (Paragraph [0046]; emphasis added).

As discussed above, the office action's indication that something that is "reflected on both systems after synchronization" anticipates "updating the first change to the

...record for both the first user and the second user substantially simultaneously... while the first user and the second user are accessing the... record" represents a misunderstanding and/or mischaracterization of the meaning of "synchronization" as disclosed in the Birkner reference. The synchronization process disclosed in the Birkner reference requires the "inspector" to "upload" and "send" the new project information in order for the new project information to be synchronized between the computer and server. (Paragraphs [0051] and [0053]). This sequence makes it impossible for another user to access the "new project information" entered by the "inspector" before and until the "inspector" activates the "upload/download menu" and "selects the new project" and "selects the send button." (Paragraphs [0050] - [0053]). Thus, the "new project information" could not be updated for two users "substantially simultaneously" and could not be updated "while the first user and the second user are accessing the... record" because the "inspector" must perform several steps manually before another user can view the new information. The "synchronization" process disclosed in the Birkner reference simply indicates how new information is entered, uploaded, and sent to a server.

The office action also states that the "[a]pplicant has only cited 'bits and pieces' of Birkner" and that the Birkner reference discloses "updating the first change to the ...record for both the first user and the second user substantially simultaneously... while the first user and the second user are accessing the... record" through teaching "[t]he data transfer can be performed using this dial up network OR directly from local area networks at the main office. Specifically, the dial up network can simply be the Plain Old Telephone Service (POTS) network." However, whether a "data transfer can be performed" using methods of data transfer other than a dial up network, such as POTS or LAN, has no bearing on whether the Birkner reference discloses "updating the first change to the ...record for both the first user and the second user substantially simultaneously... while the first user and the second user are accessing the... record." Regardless of how the data is transferred, the Birkner reference discloses that the data is transferred through periodic connections in which an end user is transferring data "at the

end of each day." The office action mischaracterizes the disclosure of the Birkner reference by inaccurately asserting that *how* data is transferred in the Birkner reference anticipates "updating the first change to the ...record for both the first user and the second user substantially simultaneously... while the first user and the second user are accessing the... record."

Additionally, the office action ignores the numerous other disclosures in the Birkner reference that the applicants previously identified that show that the periodic connection does not anticipate "updating the first change to the ...record for both the first user and the second user substantially simultaneously... while the first user and the second user are accessing the... record," For example, the Birkner reference teaches that a periodic connection is purposefully initiated by an end user in Paragraphs [0055] -[0063] in which a hot-sync process between the database and a field computer like a laptop is disclosed. Specifically, an end user activates "[0055] the dial-up network connection . . .[,] [0056] activates the upload/download menu[,] [0057] select[s] the new project[,] . . [and] [0058] select[s] the receive button to hot sync the laptop computer[.] [0059] This downloads the project specific database. The inspector creates [h]is daily field journal for that day[,] [0060] activates the upload/download menu[,] [0061] select[s] the project from a pull down list[,] [0062] select the send button[,] [0063] this uploads only the information that change for that day or range of days selected to the dial-up server." (Emphasis added). This hot syncing process is further disclosed in the Birkner reference as "after collecting data, the handheld computer is placed in a hot sync cradle or aligned with an infrared port on a host computer for data transfer. The user . . . activates a data receiving software on a workstation or a laptop. The user selects an icon to initiate data uploads and downloads to the handheld computer. The user will select the project to be updated or refreshed before selecting the icon." (Paragraph [0242]; emphasis added). This "receive button" and "send button" process and the need to "activate...software" and "select an icon" and "select the project", not to mention doing this at the end of a work day as indicated above, in order to hot-sync a remote computer to the database cannot and does not disclose "updating the first change to the ...record

for both the first user and the second user substantially simultaneously... while the first user and the second user are accessing the... record."

Accordingly, the office action fails to identify every express element and limitation of claims 1, 9, 18, and 22 in the Birkner reference. Therefore, the office action has not fulfilled the prima facie requirements to support the 35 U.S.C. §102(e) rejections. Further, the Birkner reference cannot be properly viewed as anticipating dependent claims 2, 5-8, 11-17, 19-21, and 23-28, that depend on independent claims 1, 9, 18, and 22 and the applicants respectfully request withdrawal of these rejections under 35 U.S.C. §102(e).

#### CONCLUSION

Please consider the amendments and remarks. In view of the present amendments and remarks, the applicants respectfully submit that the claims are in condition for allowance. Please contact the undersigned attorney at the address and telephone number noted below with any questions or comments.

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